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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,529	03/17/2004	Tack Sung Kim	12345/005001	5492

7590 01/03/2007  
SAMUEL S. LEE  
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EXAMINER

SAID, MANSOUR M

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/03/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/803,529

Applicant(s)

KIM, TAEK SUNG

Examiner

MANSOUR M. SAID

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1, 4-5 and 7-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Hassig et al. (2003/0201977 A1; hereinafter referred to as Hassig).**

As to **claim 1**, Hassig teaches a multiple keypad mouse system for providing a computer input (figures 1-2 and column 1, paragraph 0007), comprising a plurality of keypad mouse devices (figures 1-2 and column 1, paragraph 0010), each keypad mouse device including: a first input (figure 1, (6a & 6b)) element to generate position signals of a cursor on the display in response to movement of the first input element (figures 1-2, column 1, paragraphs 0008-0010 and column 1, paragraph 0012); at least one selection element configured to enable selection of at least one item on the display (column 1, paragraph 0009-0010); and a second input (figure 1, (10)) element to generate signals providing alphanumeric input capability (figures 1-2 and column 1, paragraph 0007 and column 1, paragraph 0010).

As to **claim 4**, Hassig teaches wherein the second input elements from the keypad mouse devices provide a substantial portion of the keyboard keys for entering alphanumeric input (figures 1-2, and column 1, paragraph 0011).

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**As to claim 5**, Hassig teaches wherein said each keypad mouse device includes a subset of all keys necessary to provide the alphanumeric input (figures 1-2, column 1, paragraph 0007 and column 1, paragraph 0011).

**As to claim 7**, Hassig teaches wherein said each keypad mouse device includes a cycle-through button for cycling through a row of different configuration of keys to represent the subset of all keys (figures 1-2 and column 1, paragraph 0010).

**As to claim 8**, Hassig teaches wherein said each keypad mouse device includes a connecting element to connect keypad mouse device together (figures 1-2 shows key pad mouse and cursor control elements) (column 1, paragraph 0007 and column 1, paragraph 0009-0012).

**As to claim 9**, Hassig teaches wherein said plurality of keypad mouse devices are combined using said connecting elements to form a single keyboard (in figures 1-2, keys have the same as the functions as in the standard IBM 101 and 102 key keyboard) (column 1, paragraph 0007 and column 1, paragraph 0010).

**As to claim 10**, Hassig teaches wherein said multiple keypad mouse system includes a single connection to provide the alphanumeric input (figures 1-2 and column 1, paragraph 0010).

**As to claim 11**, Hassig teaches wherein the second input element (figure 1-2, (10)) includes at least one alphanumeric function button (column 1, paragraph 0010).

**As to claim 12**, Hassig teaches wherein said at least one alphanumeric function button includes a Space button (in figures 1-2, keys have the same as the functions as in the standard IBM 101 and 102 key keyboard) (column 1, paragraph 0007 and column 1, paragraph 0010).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hassig in view of Zagnoev (5,936,555).**

As to claims 2-3, Hassig discloses a keypad and mouse (figures 1-2), but he omits a connection element to provide separate connection for the computer input.

However, Zagnoev teaches a combined keyboard and mouse having two separate housing (figure 1) including a keyboard mode and a mouse mode, further more, the system has capability of wireless communication of the system, means the right device and the left device have separate wireless communication, and also the keyboarded mode and the mouse system can have wireless common connection to the computer (figure 1).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate Zagnoev combined system into Hassig input device so as to send the pointing movement commands and the keying command to the computer (abstract).

5. **Claims 6 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hassig in view of Martina Teufel, (DE 299-15-155-U1; hereinafter referred to as Teufel).**

As to claim 6 and 13-14, Hassig teaches a combination mouse keypad devices having a keyboard mode and a mouse mode (figures 1-2), and further, (in figures 1-2 comprising, keys

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have the same as the functions as in the standard IBM 101 and 102 key keyboard) (column 1, paragraph 0007 and column 1, paragraph 0010).

Hassig does not expressly shows that computer mouse with a display.

However, Teufel teaches a computer mouse having a display (figures 1 and 3-4).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to combine Teufel's computer mouse having a display into Hassig's modified input device so that a user can have a control of a document in the computer mouse display.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. White (5,457,480) teaches an integrated mouse and numerical keypad device.

Rakoski (6,088,022) teaches a spherical keyboard with built-in mouse.

Rein (6,333,734 B1) teaches a method and a device for the on-hand input of data.

Kazarian (6,486,868 B1) teaches a two-handed input control apparatus and method.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mansour M. Said whose telephone number is 571-272-7679. The examiner can normally be reached on Monday through Thursday from 8:30-6:00 P.M. The examiner can also be reached on alternate Friday from 8:30 a.m. to 5:00 p.m. EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe whose telephone number is 571-272-7681.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: 571-273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to the Customer Service Window at the Randolph Building, 401, Dulany Street, Alexandria, VA 22314.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mansour M. Said

12/22/06

AMR A. AWAD  
SUPERVISORY PATENT EXAMINER

